

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/031,841A
Source: PCR/10
Date Processed by STIC: 2/14/05

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PCT

RAW SEQUENCE LISTING

DATE: 02/14/2005

PATENT APPLICATION: US/10/031,841A

TIME: 07:44:07

Input Set : A:\Kni004cp.app

Output Set: N:\CRF4\02142005\J031841A.raw

3 <110> APPLICANT: FRASER, DOUGLAS
 4 ST. GALLAY, STEVEN
 6 <120> TITLE OF INVENTION: HUMAN HOMOLOGUE OF BOVINE NEUROENDOCRINE SECRETORY PROTEIN,
 7 NESP55, POLYNUCLEOTIDES AND USES THEREOF LINKED WITH OBESITY
 9 <130> FILE REFERENCE: KNI-004CPUS
 11 <140> CURRENT APPLICATION NUMBER: 10/031,841A
 12 <141> CURRENT FILING DATE: 2002-01-22
 14 <150> PRIOR APPLICATION NUMBER: PCT/EP00/06921
 15 <151> PRIOR FILING DATE: 2000-07-20
 17 <150> PRIOR APPLICATION NUMBER: GB 9917165.4
 18 <151> PRIOR FILING DATE: 1999-07-22
 20 <160> NUMBER OF SEQ ID NOS: 17
 22 <170> SOFTWARE: PatentIn 3.2
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 2235
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Homo sapiens
 29 <220> FEATURE:
 30 <221> NAME/KEY: CDS
 31 <222> LOCATION: (3)...(761)
 33 <400> SEQUENCE: 1

p.6

34	ga att cgg ctc gag gtg cct aag agg atg gat cgg agg tcc cgg gct	47
35	Ile Arg Leu Glu Val Pro Lys Arg Met Asp Arg Arg Ser Arg Ala	
36	1 5 10 15	
38	cag cag tgg cgc cga gct cgc cat aat tac aac gac ctg tgc ccg ccc	95
39	Gln Gln Trp Arg Arg Ala Arg His Asn Tyr Asn Asp Leu Cys Pro Pro	
40	20 25 30	
42	ata ggc cgc cgg gca gcc acc gcg ctc ctc tgg ctc tcc tgc tcc atc	143
43	Ile Gly Arg Arg Ala Ala Thr Ala Leu Leu Trp Leu Ser Cys Ser Ile	
44	35 40 45	
46	gcg ctc ctc cgc gcc ctt gcc acc tcc aac gcc cgt gcc cag cag cgc	191
47	Ala Leu Leu Arg Ala Leu Ala Thr Ser Asn Ala Arg Ala Gln Gln Arg	
48	50 55 60	
50	gcg gct gcc caa cag cgc cgg agc ttc ctt aac gcc cac cac cgc tcc	239
51	Ala Ala Ala Gln Gln Arg Arg Ser Phe Leu Asn Ala His His Arg Ser	
52	65 70 75	
54	ggc gcc cag gta ttc cct gag tcc ccc gaa tcg gaa tct gac cac gag	287
55	Gly Ala Gln Val Phe Pro Glu Ser Pro Glu Ser Glu Ser Asp His Glu	
56	80 85 90 95	
58	cac gag gag gca gac ctt gag ctg tcc ctc ccc gag tgc cta gag tac	335
59	His Glu Glu Ala Asp Leu Glu Leu Ser Leu Pro Glu Cys Leu Glu Tyr	
60	100 105 110	
62	gag gaa gag ttc gac tac gag acc gag agc gag acc gag tcc gaa atc	383

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63 Glu Glu Glu Phe Asp Tyr Glu Thr Glu Ser Glu Thr Glu Ser Glu Ile
64          115          120          125
66 gag tcc gag acc gac ttc gag acc gag cct gag acc gcc ccc acc act 431
67 Glu Ser Glu Thr Asp Phe Glu Thr Glu Pro Glu Thr Ala Pro Thr Thr
68          130          135          140
70 gag ccc gag acc gag cct gaa gac gat cgc ggc ccg gtg gtg ccc aag 479
71 Glu Pro Glu Thr Glu Pro Glu Asp Asp Arg Gly Pro Val Val Pro Lys
72          145          150          155
74 cac tcc acc ttc ggc cag tcc ctc acc cag cgt ctg cac gct ctc aag 527
75 His Ser Thr Phe Gly Gln Ser Leu Thr Gln Arg Leu His Ala Leu Lys
76 160          165          170          175
78 ttg cga agc ccc gac gcc tcc cca agt cgc gcg ccg ccc agc act cag 575
79 Leu Arg Ser Pro Asp Ala Ser Pro Ser Arg Ala Pro Pro Ser Thr Gln
80          180          185          190
82 gag ccc cag agc ccc agg gaa ggg gag gag ctc aag ccc gag gac aaa 623
83 Glu Pro Gln Ser Pro Arg Glu Gly Glu Glu Leu Lys Pro Glu Asp Lys
84          195          200          205
86 gat cca agg gac ccc gaa gag tcg aag gag ccc aag gag gag aag cag 671
87 Asp Pro Arg Asp Pro Glu Glu Ser Lys Glu Pro Lys Glu Glu Lys Gln
88          210          215          220
90 cgg cgt cgc tgc aag cca aag aag ccc acc cgc cgt gac gcg tcc ccg 719
91 Arg Arg Arg Cys Lys Pro Lys Lys Pro Thr Arg Arg Asp Ala Ser Pro
92          225          230          235
94 gag tcc cct tcc aaa aag gga ccc atc ccc atc cgg cgt cac 761
95 Glu Ser Pro Ser Lys Lys Gly Pro Ile Pro Ile Arg Arg His
96 240          245          250
98 taatggagga cgccgtccag attctccttg ttttcatgga ttcaggtgct ggagaatctg 821
99 gtaaaagcac cattgtgaag catagttagga tcctgcatgt taatgggttt aatggagagg 881
100 gcggcgaaga ggacccgcag gctgcaagga gcaacagcga tgggtgagaag gcaaccaaag 941
101 tgcaggacat caaaaacaac ctgaaagagg cgattgaaac cattgtggcc gccatgagca 1001
102 acctggtgcc ccccgaggag ctggccaacc ccgagaacca gttcagagtg gactacattc 1061
103 tgagtgtgat gaacgtgcct gactttgact tccctcccga attctatgag catgccaaag 1121
104 ctctgtggga ggatgaagga gtgctgcct gctacgaacg ctccaacgag taccagctga 1181
105 ttgactgtgc ccagtacttc ctggacaaga tcgacgtgat caagcaggct gactatgtgc 1241
106 cgagcgatca ggacctgctt cgctgccgtg tcctgacttc tggaaatcttt gagaccaagt 1301
107 tccaggtgga caaagtcaac ttccacatgt ttgacgtggg tggccagcgc gatgaacgcc 1361
108 gcaagtggat ccagtgcctt aacgatgtga ctgccatcat ctctgtggtg gccagcagca 1421
109 gctacaacat ggtcatccgg gaggacaacc agaccaaccg cctgcaggag gctctgaacc 1481
110 tcttcaagag catctggaac aacagatggc tgcgcaccat ctctgtgatc ctgttcctca 1541
111 acaagcaaga tctgctcgct gagaaagtcc ttgctgggaa atcgaagatt gaggactact 1601
112 ttccagaatt tgctcgctac actactcctg aggatgctac tcccagagccc ggagaggacc 1661
113 cgcgcgtgac ccgggccaaag taattcattc gagatgagtt tctgaggatc agcactgcca 1721
114 gtggagatgg gcgtcactac tgctaccctc atttcacctg cgctgtggac actgagaaca 1781
115 tccgccgtgt gttcaacgac tgccgtgaca tcattcagcg catgcacctt cgtcagtagc 1841
116 agctgctcta agaagggaac ccccaaattt aattaaagcc ttaagcaca ttaattaaaa 1901
117 gtgaaacgta attgtacaag cagttaatca cccaccatag ggcatgatta acaaagcaac 1961
118 ctttcccttc ccccgagtga ttttgcgaaa cccctttttc ctttcagctt gcttagatgt 2021
119 tccaaattta gaaagcttaa ggccgcctac agaaaaagga aaaaaggcca caaaagttcc 2081
120 ctctcacttt cagtaaaaat aaataaaaaca gcagcagcaa acaaataaaa tgaaataaaa 2141

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Input Set : A:\Kni004cp.app

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121 gaaacaaatg aaataaatat tgtgttgtgc agcattaaaa aaaatcaaaa taaaaattaa 2201
122 atgtgagcaa aaaaaaaaaa aaaagggcgg ccgc 2235
124 <210> SEQ ID NO: 2
125 <211> LENGTH: 253
126 <212> TYPE: PRT
127 <213> ORGANISM: Homo sapiens
129 <400> SEQUENCE: 2
130 Ile Arg Leu Glu Val Pro Lys Arg Met Asp Arg Arg Ser Arg Ala Gln
131 1 5 10 15
133 Gln Trp Arg Arg Ala Arg His Asn Tyr Asn Asp Leu Cys Pro Pro Ile
134 20 25 30
136 Gly Arg Arg Ala Ala Thr Ala Leu Trp Leu Ser Cys Ser Ile Ala
137 35 40 45
139 Leu Leu Arg Ala Leu Ala Thr Ser Asn Ala Arg Ala Gln Gln Arg Ala
140 50 55 60
142 Ala Ala Gln Gln Arg Arg Ser Phe Leu Asn Ala His His Arg Ser Gly
143 65 70 75 80
145 Ala Gln Val Phe Pro Glu Ser Pro Glu Ser Glu Ser Asp His Glu His
146 85 90 95
148 Glu Glu Ala Asp Leu Glu Leu Ser Leu Pro Glu Cys Leu Glu Tyr Glu
149 100 105 110
151 Glu Glu Phe Asp Tyr Glu Thr Glu Ser Glu Thr Glu Ser Glu Ile Glu
152 115 120 125
154 Ser Glu Thr Asp Phe Glu Thr Glu Pro Glu Thr Ala Pro Thr Thr Glu
155 130 135 140
157 Pro Glu Thr Glu Pro Glu Asp Asp Arg Gly Pro Val Val Pro Lys His
158 145 150 155 160
160 Ser Thr Phe Gly Gln Ser Leu Thr Gln Arg Leu His Ala Leu Lys Leu
161 165 170 175
163 Arg Ser Pro Asp Ala Ser Pro Ser Arg Ala Pro Pro Ser Thr Gln Glu
164 180 185 190
166 Pro Gln Ser Pro Arg Glu Gly Glu Glu Leu Lys Pro Glu Asp Lys Asp
167 195 200 205
169 Pro Arg Asp Pro Glu Glu Ser Lys Glu Pro Lys Glu Glu Lys Gln Arg
170 210 215 220
172 Arg Arg Cys Lys Pro Lys Lys Pro Thr Arg Arg Asp Ala Ser Pro Glu
173 225 230 235 240
175 Ser Pro Ser Lys Lys Gly Pro Ile Pro Ile Arg Arg His
176 245 250
179 <210> SEQ ID NO: 3
180 <211> LENGTH: 4
181 <212> TYPE: PRT
182 <213> ORGANISM: Bovine Sp.
184 <400> SEQUENCE: 3
185 Leu Ser Ala Leu
186 1
189 <210> SEQ ID NO: 4
190 <211> LENGTH: 8
191 <212> TYPE: PRT

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Input Set : A:\Kni004cp.app

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192 <213> ORGANISM: Bovine Sp.
194 <400> SEQUENCE: 4
195 Gly Ala Ile Pro Ile Arg Arg His
196 1 5
199 <210> SEQ ID NO: 5
200 <211> LENGTH: 4
201 <212> TYPE: PRT
202 <213> ORGANISM: Homo sapiens
204 <400> SEQUENCE: 5
205 Leu His Ala Leu
206 1
209 <210> SEQ ID NO: 6
210 <211> LENGTH: 8
211 <212> TYPE: PRT
212 <213> ORGANISM: Homo sapiens
214 <400> SEQUENCE: 6
215 Gly Pro Ile Pro Ile Arg Arg His
216 1 5
219 <210> SEQ ID NO: 7
220 <211> LENGTH: 4
221 <212> TYPE: PRT
222 <213> ORGANISM: Homo sapiens
224 <400> SEQUENCE: 7
225 Ser Phe Leu Asn
226 1
229 <210> SEQ ID NO: 8
230 <211> LENGTH: 4
231 <212> TYPE: PRT
232 <213> ORGANISM: Homo sapiens
234 <400> SEQUENCE: 8
235 Pro Ser Lys Lys
236 1
239 <210> SEQ ID NO: 9
240 <211> LENGTH: 4
241 <212> TYPE: PRT
242 <213> ORGANISM: Homo sapiens
244 <400> SEQUENCE: 9
245 Met Asp Arg Arg
246 1
249 <210> SEQ ID NO: 10
250 <211> LENGTH: 4
251 <212> TYPE: PRT
252 <213> ORGANISM: Homo sapiens
254 <400> SEQUENCE: 10
255 Ala Thr Ala Leu
256 1
259 <210> SEQ ID NO: 11
260 <211> LENGTH: 64
261 <212> TYPE: PRT

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Input Set : A:\Kni004cp.app

Output Set: N:\CRF4\02142005\J031841A.raw

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262 <213> ORGANISM: Homo sapiens
264 <220> FEATURE:
265 <221> NAME/KEY: MOD_RES
266 <222> LOCATION: (1)..(30)
267 <223> OTHER INFORMATION: any amino acid, which may or may not be present
269 <220> FEATURE:
270 <221> NAME/KEY: MOD_RES
271 <222> LOCATION: (35)..(64)
272 <223> OTHER INFORMATION: any amino acid, which may or may not be present
274 <400> SEQUENCE: 11
W--> 275 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
276 1 5 10 15
278 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu His
279 20 25 30
281 Ala Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
282 35 40 45
284 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
285 50 55 60
288 <210> SEQ ID NO: 12
289 <211> LENGTH: 68
290 <212> TYPE: PRT
291 <213> ORGANISM: Homo sapiens
293 <220> FEATURE:
294 <221> NAME/KEY: MOD_RES
295 <222> LOCATION: (1)..(30)
296 <223> OTHER INFORMATION: any amino acid, which may or may not be present
298 <220> FEATURE:
299 <221> NAME/KEY: MOD_RES
300 <222> LOCATION: (39)..(68)
301 <223> OTHER INFORMATION: any amino acid, which may or may not be present
304 <400> SEQUENCE: 12
W--> 305 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
306 1 5 10 15
308 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Pro
309 20 25 30
311 Ile Pro Ile Arg Arg His Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
312 35 40 45
314 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
315 50 55 60
317 Xaa Xaa Xaa Xaa
318 65
321 <210> SEQ ID NO: 13
322 <211> LENGTH: 11
323 <212> TYPE: PRT
324 <213> ORGANISM: Homo sapiens
326 <400> SEQUENCE: 13
327 Gln Arg Leu His Ala Leu Lys Leu Arg Ser Pro
328 1 5 10
331 <210> SEQ ID NO: 14

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/14/2005
 PATENT APPLICATION: US/10/031,841A TIME: 07:44:08

Input Set : A:\Kni004cp.app
 Output Set: N:\CRF4\02142005\J031841A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:11; Xaa Pos. ~~1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22~~
 Seq#:11; Xaa Pos. ~~23,24,25,26,27,28,29,30,35,36,37,38,39,40,41,42,43,44,45~~
 Seq#:11; Xaa Pos. ~~46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64~~
 Seq#:12; Xaa Pos. ~~1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22~~
 Seq#:12; Xaa Pos. ~~23,24,25,26,27,28,29,30,39,40,41,42,43,44,45,46,47,48,49~~
 Seq#:12; Xaa Pos. ~~50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68~~
 Seq#:16; Xaa Pos. ~~1,2,3,4,5,6,7,8,15,17,18,57,58,68,71,80,87,91,92,93,94,95~~
 Seq#:16; Xaa Pos. ~~98,99,101,103,109,112,120,122,124,133,138,139,153,154,161~~
 Seq#:16; Xaa Pos. ~~162,165,173,176,194,202,203,204,217,223,224,225,227,228~~
 Seq#:16; Xaa Pos. ~~240,248,250~~

VERIFICATION SUMMARY

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Input Set : A:\Kni004cp.app

Output Set: N:\CRF4\02142005\J031841A.raw

L:275 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
M:341 Repeated in SeqNo=11
L:305 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
M:341 Repeated in SeqNo=12
L:567 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
M:341 Repeated in SeqNo=16